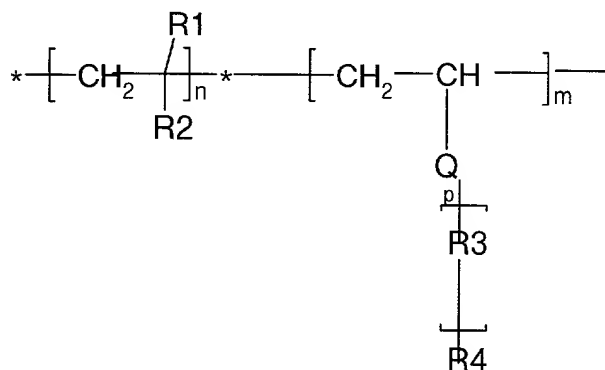


WHAT IS CLAIMED IS:

1. An aqueous superplasticizer solution for concrete compositions comprising a polymeric superplasticizer and an air-detraining effective amount of an air detraining agent which includes a block polyether containing ethylene oxide and propylene oxide units.

2. The aqueous superplasticizer solution of claim 1, wherein the air detraining agent includes a comb polymer represented by the following general formula (I):



where $R_1 = \text{H}$ or CH_3 ;

$R_2 = \text{COOM}, \text{OCH}_3, \text{SO}_3\text{M}, \text{O-CO-CH}_3, \text{CO-NH}_2$, where M is a salt of Na, Ca, K, or Mg;

$R_3 =$ an alkylene oxide group selected from the group consisting of ethylene oxide, propylene oxide and/or butylene oxide, and wherein the alkylene oxide groups can be in either a block or random distribution;

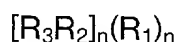
$R_4 = \text{CH}_3$ or alkyl;

$Q = \text{C(O)O}, \text{C(O)NH}, \text{CH}_2\text{O}, \text{CH}_2\text{N}, \text{O}$;

m and n are such that between 98% to 2 % of m units and between about 2% to about 98% of n units are present in the polymer; and

p is between 1 to 300.

3. The aqueous superplasticizer solution of claim 1, wherein the air detraining agent includes a block polyether which is a block copolymer of ethylene oxide and propylene oxide represented by the following general formula (II):



wherein:

R₁ is an initiator containing reactive terminal groups capable of adding to C₂ – C₄ epoxides,

R₂ is either propylene oxide or butylene oxide;

R₃ is ethylene oxide, and

n represents the functionality of the initiator and is a number greater than or equal to 2, and wherein

R₃ and R₂ are interchangeable in the formula.

4. The aqueous superplasticizer solution of claim 3, wherein the block polyether is a block copolymer of ethylene oxide and up to about 30% of propylene oxide.

5. The aqueous superplasticizer solution of claim 1, wherein the air detraining agent is dispersed throughout the solution in an amount between about 0.01 wt.% to about 1.0 wt.%.

6. The aqueous superplasticizer solution of claim 5, wherein the air detraining agent is dispersed throughout the solution in an amount between about 0.01 wt.% to about 0.7 wt.%.

7. The aqueous superplasticizer solution of claim 5, wherein the air detraining agent is dispersed throughout the solution in an amount between about 0.1 wt.% to about 0.5 wt.%.

8. A cement composition which comprises a hydraulic cement and an aqueous superplasticizer solution as in any one of claims 1-7.

9. The composition of claim 8, wherein the superplasticizer solution is present in an amount of at least about 0.005 wt.%, based on the total weight of the cement composition.

10. The composition of claim 9, wherein the superplasticizer solution is present in an amount between about 0.005 wt.% to about 5.0 wt.%.

11. The composition of claim 9, wherein the superplasticizer solution is present in an amount between about 0.03 wt.% to about 1.0 wt.%.